

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number: 198148

TO: Shailendra Kumar Location: 5c03 / 5c18 Tuesday, August 15, 2006

Art Unit: 1621

Phone: 571-272-0640

Serial Number: 10 / 541225

From: Jan Delaval

Location: Biotech-Chem Library

Remsen 1a51

Phone: 571-272-2504

jan.delaval@uspto.gov

Search Notes



=> fil req FILE 'REGISTRY' ENTERED AT 08:20:37 ON 15 AUG 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 14 AUG 2006 HIGHEST RN 901253-54-1 DICTIONARY FILE UPDATES: 14 AUG 2006 HIGHEST RN 901253-54-1

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH January 6, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

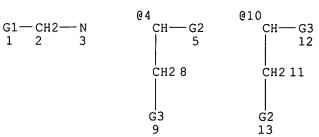
=> d sta que 132 L17 L18

SCR 1926 OR 2019 SCR 2021

L19 SCR 1126 OR 1149 OR 1164

L20 SCR 1199 AND 1992

L22 STR



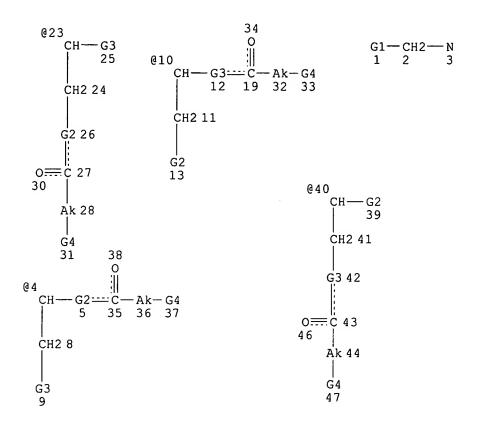
VAR G1=4/10VAR G2=O/S VAR G3=O/S/N NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L24 7731 SEA FILE=REGISTRY SSS FUL L22 AND L20 AND L19 AND (L18 OR L17) L30 STR



VAR G1=4/10/23/40
VAR G2=O/S
VAR G3=O/S/N
VAR G4=S/SE
NODE ATTRIBUTES:
CONNECT IS E2 RC AT 28
CONNECT IS E2 RC AT 32
CONNECT IS E2 RC AT 36
CONNECT IS E2 RC AT 44
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

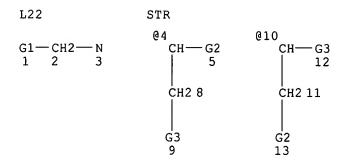
GRAPH ATTRIBUTES: RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE

L32 110 SEA FILE=REGISTRY SUB=L24 SSS FUL L30

100.0% PROCESSED 7731 ITERATIONS 110 ANSWERS

SEARCH TIME: 00.00.01



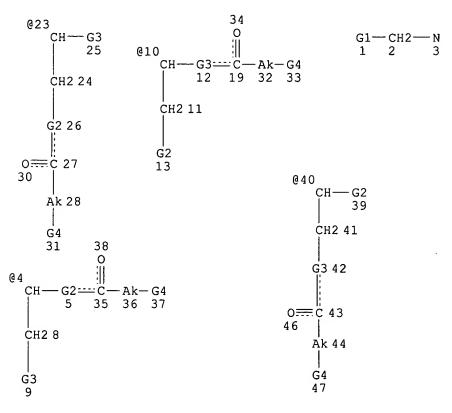
VAR G1=4/10 VAR G2=O/S VAR G3=O/S/N NODE ATTRIBUTES: DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L24 7731 SEA FILE=REGISTRY SSS FUL L22 AND L20 AND L19 AND (L18 OR L17) L30 STR



VAR G1=4/10/23/40 VAR G2=O/S VAR G3=O/S/N VAR G4=S/SE

```
NODE ATTRIBUTES:
```

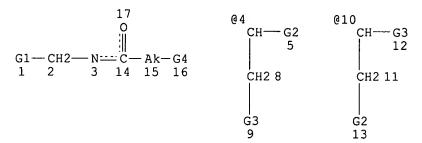
CONNECT IS E2 RC AT 28
CONNECT IS E2 RC AT 32
CONNECT IS E2 RC AT 36
CONNECT IS E2 RC AT 44
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 35

STEREO ATTRIBUTES: NONE

L32 110 SEA FILE=REGISTRY SUB=L24 SSS FUL L30 L33 STR



VAR G1=4/10 VAR G2=O/S VAR G3=O/S/N VAR G4=S/SE NODE ATTRIBUTES: CONNECT IS E2 RC AT 15 DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED NUMBER OF NODES IS 15

STEREO ATTRIBUTES: NONE

L35 141 SEA FILE=REGISTRY SUB=L24 SSS FUL L33

L37 154 SEA FILE=REGISTRY ABB=ON PLU=ON L32 OR L35

=> d his

(FILE 'HOME' ENTERED AT 07:24:29 ON 15 AUG 2006) SET COST OFF

FILE 'HCAPLUS' ENTERED AT 07:24:45 ON 15 AUG 2006

L1 1 S US20060069156/PN OR (US2005-541225# OR WO2004-FR319 OR FR2003

E GENFIT/PA, CS

L2 27 S E3-E13

E DARTEIL/AU

L3 20 S E4-E8

E CAUMONT/AU

L4 11 S E8,E14

E BERTRAND/AU

L5 5 S E3

```
E BERTRAND K/AU
L6
               8 S E3-E5, E7
                 E NAJIB/AU
L7
              33 S E22, E24, E25
                 SEL RN L1
     FILE 'REGISTRY' ENTERED AT 07:29:49 ON 15 AUG 2006
              35 S E1-E35
L8
L9
              9 S 733010-33-8 OR 733010-35-0 OR 733010-37-2 OR 733010-39-4 OR 7
L10
              1 S (733010-33-8 OR 733010-35-0 OR 733010-37-2 OR 733010-39-4 OR
L11
              10 S L9, L10
L12
             25 S L8 NOT L11
L13
                 STR
L14
              1 S L13
L15
                 STR L13
L16
               0 S L15
L17
                 SCR 1926 OR 2019
L18
                 SCR 2021
L19
                 SCR 1126 OR 1149 OR 1164
L20
                 SCR 1199 AND 1992
L21
              0 S L13 AND (L17 OR L18) AND L19 AND L20
L22
                 STR L13
L23
             25 S L22 AND L20 AND L19 AND (L18 OR L17)
L24
           7731 S L22 AND L20 AND L19 AND (L18 OR L17) FUL
                 SAV L24 KUMAR541/A TEMP
L25
             18 S L8 AND L24
L26
              8 S L25 NOT L11
L27
              5 S L26 NOT (C19H39NO3S OR C15H28N2O5S OR C12H21NO4S2)
L28
             15 S L11, L27
L29
              8 S L15 SAM SUB=L24
L30
                 STR L15
L31
              7 S L30 SAM SUB=L24
L32
            110 S L30 FUL SUB=L24
                 SAV L32 KUMAR541A/A
L33
                 STR L22
L34
              9 S L33 SAM SUB=L24
L35
            141 S L33 FUL SUB=L24
                 SAV L35 KUMAR541B/A
L36
                 STR
L37
            154 S L32 OR L35
              1 S L36 SAM SUB=L37
L38
L39
             19 S L36 FUL SUB=L37
                 SAV L39 KUMAR541C/A
L40
            135 S L37 NOT L39
L41
            120 S L40 NOT L28
     FILE 'HCAOLD' ENTERED AT 08:02:34 ON 15 AUG 2006
L42
              0 S L28
L43
              1 S L41
                 SEL AN
                 EDIT E36 /AN /OREF
     FILE 'HCAPLUS' ENTERED AT 08:03:57 ON 15 AUG 2006
L44
              1 S E36
L45
              3 S L28
L46
             42 S L41
L47
              1 S L44 AND L45, L46
L48
              3 S L45 AND L1-L7
L49
              2 S L46 AND L1-L7
L50
             31 S L46 AND (PD<=20030212 OR PRD<=20030212 OR AD<=20030212)
```

```
L51
              0 S L41 (L) (THU OR PAC OR PKT OR DMA)/RL AND L50
L52
              0 S L41 (L) BAC/RL AND L50
L53
             14 S L50 AND (PHARMACEUT? OR PHARMACOL? OR BIOMOL? OR PATHOL? OR C
L54
             16 S L50 AND P/DT
L55
             24 S L53, L54
L56
              7 S L50 NOT L55
                SEL HIT RN L50
     FILE 'REGISTRY' ENTERED AT 08:08:36 ON 15 AUG 2006
L57
             62 S E37-E98
L58
             58 S L41 NOT L57
L59
              3 S L58 AND (C19H40N2OS2 OR C35H69N02S4 OR C47H92N2O3S2)
     FILE 'HCAOLD' ENTERED AT 08:17:01 ON 15 AUG 2006
L60
              0 S L59
     FILE 'HCAPLUS' ENTERED AT 08:17:04 ON 15 AUG 2006
L61
              2 S L59
L62
              4 S L47-L49, L61
L63
              4 S L45, L62
                SEL RN
     FILE 'REGISTRY' ENTERED AT 08:19:24 ON 15 AUG 2006
L64
            168 S E99-E266
L65
             23 S L64 AND L24
L66
              5 S L65 NOT L28, L59
```

FILE 'REGISTRY' ENTERED AT 08:20:37 ON 15 AUG 2006

=> fil hcaplus FILE 'HCAPLUS' ENTERED AT 08:20:57 ON 15 AUG 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 15 Aug 2006 VOL 145 ISS 8 FILE LAST UPDATED: 14 Aug 2006 (20060814/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d 163 bib abs hitstr retable tot

L63 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:650984 HCAPLUS

DN 141:190511

TI Preparation of acyl aminopropanediols as PPAR, in particular PPAR α ,

```
agonists and antioxidants for treating cerebral ischemia and related diseases % \left( 1\right) =\left( 1\right) +\left( 1
```

```
IN Darteil, Raphael; Caumont, Bertrand Karine;
Najib, Jamila
PA Genfit S. A., Fr.
SO Fr. Demande, 95 pp.
CODEN: FRXXBL
DT Patent
LA French
FAN.CNT 1
```

	PATENT NO.	KIND DATE	APPLICATION NO.	DATE
PI		A1 20040 B1 20050		20030212 <
	AU 2004213203	A1 20040	902 AU 2004-213203	20040212 <
	CA 2515680	AA 20040	902 CA 2004-2515680	20040212 <
	WO 2004074239	A1 20040	902 WO 2004-FR319	20040212 <
	W: AE, AG,	AL, AM, AT, AU,	AZ, BA, BB, BG, BR, BW, BY,	BZ, CA, CH,
			DK, DM, DZ, EC, EE, EG, ES,	
			IL, IN, IS, JP, KE, KG, KP,	
			MA, MD, MG, MK, MN, MW, MX,	
			MZ, SD, SL, SZ, TZ, UG, ZM,	
			EE, ES, FI, FR, GB, GR, HU,	
			SK, TR, BF, BJ, CF, CG, CI,	
		ML, MR, NE, SN,		
	EP 1592660	A1 20051	109 EP 2004-710412	20040212 <
	R: AT, BE,		FR, GB, GR, IT, LI, LU, NL,	
	IE, SI,	LT, LV, FI, RO,	MK, CY, AL, TR, BG, CZ, EE,	HU, SK
	CN 1747928		315 CN 2004-80004024	
	JP 2006517570	T2 20060	727 JP 2006-502143	20040212 <
	US 2006069156		330 US 2005-541225	
PRAI	FR 2003-1688		212 <	
	WO 2004-FR319	W 20040	212 <	
os	MARPAT 141:1905	11		

GI

- AB Title compds. I [wherein F, G = independently O, S, NR4; F = G = NR4 never possible; R, R4 = independently H, (un)saturated (un)substituted alkyl; R1, R2, R3 = independently H, C(:O)R5, C(:O)(CH2)2n+1-X-R6, with a least one of R1, R2, R3 = C(:O)(CH2)2n+1-X-R6; R5 = (un)saturated (un)substituted (C1-C25) alkyl, optionally containing a cyclic group; X = S, Se, SO, SO2; n = 0-11; R6 = (un)saturated (un)substituted (C3-C23) alkyl, optionally containing
 - cyclic group and/or O, S, Se, SO, SO2; with the exclusion of compds. for which FR2 = GR3 = OH; their optical and geometrical isomers, racemates, salts, hydrates and mixts.] were prepared as peroxisome proliferator-activated receptors- α (PPAR α) agonists and antioxidants for treating cerebral ischemia and related diseases. For example, II was prepared in 3 steps from 1-bromotetradecane, mercaptoacetic acid, 3-aminopropane-1,2,-diol, and palmitic acid. In an antioxidant test, selected I diminished the formation of oxidation product of LDL by AAPH by 33%. Selected I were PPAR α agonists and showed induced luciferase activity via PPAR α /Gal4 transactivation. I are neuroprotectants useful for treating ischemia.
- TT 733010-53-2P, 1,3-Diamino-2-(tetradecylthioacetyloxy)propane dihydrochloride

RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(PPAR α agonist; preparation of acyl aminopropanediols as PPAR agonists for treating ischemia)

RN 733010-53-2 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

IT 733010-33-8P, 1-[(Tetradecylthioacetyl)amino]-2,3di[(palmitoyl)oxy]propane 733010-35-0P, 3-[(Tetradecylthioacetyl)amino]-1,2-di[(tetradecylthioacetyl)oxy]propane **733010-37-2P**, 3-[(Palmitoyl)amino]-1,2di[(tetradecylthioacetyl)oxy]propane 733010-39-4P, 1,3-Di[(tetradecylthioacetyl)amino]propan-2-ol 733010-41-8P, 1,3-Diamino-2-[[(tetradecylthio)acetyl]oxy]propane 733010-44-1P, 1,3-Di[(tetradecylthioacetyl)amino]-2-[(tetradecylthioacetyl)oxy]propane 733010-48-5P 733010-54-3P, 1,3-Di[(tetradecylthioacetyl)amino]-2-[(tetradecylthioacetyl)thio]propane 738604-36-9P, 1,3-Dioleoylamino-2-(tetradecylthioacetyloxy)propane RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (PPARa agonist; preparation of acyl aminopropanediols as PPAR agonists for treating ischemia) RN 733010-33-8 HCAPLUS CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ || \\ \text{Me-} (\text{CH}_2)_{14} - \text{C-} \text{O-} \text{CH}_2 \quad \text{O} \\ | \quad \quad || \\ || \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} (\text{CH}_2)_{14} - \text{Me}_2 \\ || \\ \text{O} \end{array}$$

RN 733010-35-0 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 1-[[[(tetradecylthio)acetyl]amino]methyl]1,2-ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-37-2 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me-} \ (\text{CH}_2)_{13} - \text{S-} \ \text{CH}_2 - \text{C-} \ \text{O} \\ | \\ \text{Me-} \ (\text{CH}_2)_{13} - \text{S-} \ \text{CH}_2 - \text{C-} \ \text{O-} \ \text{CH}_2 - \text{CH-} \ \text{CH}_2 - \text{NH-} \ \text{C-} \ (\text{CH}_2)_{14} - \text{Me} \\ || \\ \text{O} \end{array}$$

RN 733010-39-4 HCAPLUS

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-41-8 HCAPLUS

RN 733010-44-1 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1-

[[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} (\text{CH}_2)_{13} - \text{Me} \\ \parallel & \parallel \\ \text{O} \end{array}$$

RN 733010-48-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1 [[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl] ester (9CI) (CA
 INDEX NAME)

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me- (CH}_2)_{13} - \text{S- CH}_2 - \text{C- S- CH}_2 & \text{O} \\ & | & || \\ \text{Me- (CH}_2)_{13} - \text{S- CH}_2 - \text{C- NH- CH}_2 - \text{CH- S- C- CH}_2 - \text{S- (CH}_2)_{13} - \text{Me} \\ & || & \text{O} \end{array}$$

RN 733010-54-3 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(tetradecylthio)acetyl]amino]1-[[[(tetradecylthio)acetyl]amino]methyl]ethyl] ester (9CI) (CA INDEX
NAME)

$$\begin{array}{c} & \text{Me-} \quad \text{(CH}_2)_{13} - \text{S-CH}_2 - \text{C-NH-CH}_2 \quad \text{O} \\ & | & | \\ \text{Me-} \quad \text{(CH}_2)_{13} - \text{S-CH}_2 - \text{C-NH-CH}_2 - \text{CH-S-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ & | & | \\ \text{O} \end{array}$$

RN 738604-36-9 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(9Z)-1-oxo-9-octadecenyl]amino]-1[[[(9Z)-1-oxo-9-octadecenyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

Me (CH₂) 7
$$Z$$
 (CH₂) 7 X (CH₂) X (CH₂) X (CH₂) X (CH₂) X (CH₂

jan delaval - 15 august 2006

PAGE 1-B

NAME)

IT **733010-52-1P**, 1,3-Di[(tert-butyloxycarbonyl)amino]-2-[[(tetradecylthio)acetyl]oxy]propane 733010-56-5P, 1,3-Di[(tert-butyloxycarbonyl)amino]-2-[(tetradecylthioacetyl)thio]propane **733010-61-2P**, 1-[(tert-Butyloxycarbonyl)amino]-2,3di[[(tetradecylthio)acetyl]thio]propane 736992-56-6P, 1-Amino-2,3-di[[(tetradecylthio)acetyl]thio]propane hydrochloride 738604-37-0P, 1,3-Diamino-2-(tetradecylthioacetylthio)propane dihydrochloride RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (intermediate; preparation of acyl aminopropanediols as PPAR agonists for treating ischemia) RN 733010-52-1 HCAPLUS CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-

[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA INDEX

$$\begin{array}{c} \text{O} & | \\ | \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ | & | \\ \text{t-BuO-C-NH-CH}_2 - \text{CH-O-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ | \\ | & \text{O} \end{array}$$

RN 733010-56-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

RN 733010-61-2 HCAPLUS

$$\begin{array}{c} & \circ \\ & | \\ & \text{t-BuO-C-NH-CH}_2 & \circ \\ & | & | \\ & | \\ \text{Me- (CH}_2)_{13} - \text{S-CH}_2 - \text{C-S-CH}_2 - \text{CH-S-C-CH}_2 - \text{S- (CH}_2)_{13} - \text{Me} \\ & | & \circ \\ \end{array}$$

RN 736992-56-6 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2-ethanediyl] ester, hydrochloride (9CI) (CA INDEX NAME)

● HCl

RN 738604-37-0 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-amino-1-(aminomethyl)ethyl] ester, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RETABLE

Referenced Author (RAU)	Year VOL (RPY) (RVL) (RPG)	(RWK)	Referenced File
Johns Hopkins Universi Rahman, M Sankyo		 1656	WO 9910321 A Journal of Medicinal JP 2000169443 A	HCAPLUS

L63 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 2004:650967 HCAPLUS

DN 141:185113

TI Therapeutic use of acyl glycerols and their nitrogen and sulfur analogs

IN Darteil, Raphael; Caumont, Bertrand Karine;
Najib, Jamila

PA Genfit S. A., Fr.

SO Fr. Demande, 144 pp.

CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

```
PΙ
     FR 2850870
                          A1
                                20040813
                                            FR 2003-1691
                                                                    20030212
     FR 2850870
                          B1
                                20060728
    WO 2004073698
                          A1
                                20040902
                                                                    20040212
                                            WO 2004-FR322
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH,
             CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,
             GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,
             LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI
         RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,
             BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,
             MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,
             GQ, GW, ML, MR, NE, SN, TD, TG
    EP 1596845
                          A1
                                20051123
                                            EP 2004-710415
                                                                    20040212
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
    US 2006154984
                          A1
                                20060713
                                            US 2005-542512
                                                                    20050718
PRAI FR 2003-1691
                          Α
                                20030212
    WO 2004-FR322
                          W
                                20040212
OS
    MARPAT 141:185113
```

AB The invention discloses the use of acyl glycerols and their nitrogen and sulfur analogs for the therapy and in particular in human health. The compds. of the invention have advantageous pharmacol. properties and are in particular usable for the prevention and treatment of neurodegenerative diseases.

TT 733010-33-8P 733010-35-0P 733010-37-2P 733010-39-4P 733010-46-3P 733010-48-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use) 733010-33-8 HCAPLUS

CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{14} - \text{C-} \text{O-} \text{CH}_2 & \text{O} \\ & | & | \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} (\text{CH}_2)_{14} - \text{Me} \\ & | & \\ \text{O} \end{array}$$

RN 733010-35-0 HCAPLUS

RN

CN Acetic acid, (tetradecylthio)-, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O-} \text{CH}_2 & \text{O} \\ | & | & | \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ | & | & | \\ \text{O} \end{array}$$

RN 733010-37-2 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O} & \text{O} \\ \| \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O-} \text{CH}_2 - \text{CH-} \text{CH}_2 - \text{NH-} \text{C-} (\text{CH}_2)_{14} - \text{Me} \\ \| \\ \text{O} \end{array}$$

RN 733010-39-4 HCAPLUS

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-46-3 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[(1-oxotetradecyl)amino]-1-[[(1-oxotetradecyl)amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S} & \text{O} \\ \| \\ \text{Me-} (\text{CH}_2)_{12} - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{CH}_2 - \text{NH-} \text{C-} (\text{CH}_2)_{12} - \text{Me} \\ \| \\ \text{O} \end{array}$$

RN 733010-48-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-,.S,S'-[1 [[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl] ester (9CI) (CA
 INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S-} \text{CH}_2 & \text{O} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{C-} \text{C-} \text{CH}_2 - \text{C-} \text{C-} \text{CH}_2 - \text{C-} \text{$$

IT 733010-41-8 733010-44-1

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-41-8 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester (9CI) (CA INDEX NAME)

$$^{\rm H_2N-CH_2}_{\rm H_2N-CH_2-CH-O-C-CH_2-S-(CH_2)_{13}-Me}$$

RN 733010-44-1 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1[[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} (\text{CH}_2)_{13} - \text{Me} \\ \parallel \\ \text{O} \end{array}$$

TT 733010-52-1P 733010-53-2P 733010-56-5P 733010-57-6P 733010-61-2P 733010-62-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-52-1 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ || \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ | & || \\ \text{t-BuO-C-NH-CH}_2 - \text{CH-O-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ || \\ || \\ \text{O} \end{array}$$

RN 733010-53-2 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

●2 HC1

RN 733010-56-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \parallel \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{t-BuO-C-NH-CH}_2 - \text{CH-S-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ \parallel & \text{O} \end{array}$$

RN 733010-57-6 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-amino-1-(aminomethyl)ethyl]
 ester (9CI) (CA INDEX NAME)

RN 733010-61-2 HCAPLUS

$$\begin{array}{c} \text{O} \\ || \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ | & || \\ \text{Me- (CH}_2)_{13} - \text{S-CH}_2 - \text{C-S-CH}_2 - \text{CH-S-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ || & || \\ \text{O} \end{array}$$

RN 733010-62-3 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2-ethanediyl] ester (9CI) (CA INDEX NAME)

IT 733010-54-3P

RL: SPN (Synthetic preparation); PREP (Preparation) (acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-54-3 HCAPLUS

```
Me- (CH<sub>2</sub>)<sub>13</sub>-s-CH<sub>2</sub>-C-NH-CH<sub>2</sub> O
 \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me}
```

RETABLE

Referenced Author	Year VOL	, ∣ PG	Referenced Work	Referenced
(RAU)	(RPY) (RVL		l (RWK)	File
=======================================	=+=====+====	:=+=====	-+=============	=+=======
Calabrese, V	2001 26	739	NEUROCHEMICAL RESEA	R HCAPLUS
Combs, C	2001 39	449	NEUROCHEMISTRY INTE	R HCAPLUS
Markesbery, W	1999 9	133	IBRAIN PATHOLOGY	HCAPLUS

- L63 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2004:650966 HCAPLUS
- DN 141:200217
- ΤI Acyl aminopropanediols and their nitrogen and sulfur analogs, their preparation, and their therapeutic and cosmetic use
- IN Najib, Jamila
- PA Genfit S. A., Fr.
- SO Fr. Demande, 114 pp.
 - CODEN: FRXXBL
- DT Patent
- T.Z French

LA FAN	CNT :																	
27111.			NO.			KIN	D	DATE			APPL	ICAT	ION 1	NO.		D.	ATE	
ΡI	FR 2	2850	869			A1		2004	0813		FR 2	003-	1689			2	0030	212
	FR 2	2850	869			В1		2005	0325									
	CA 2	2515	480			AA		2004	0902		CA 2	004-	2515	480		2	0040	212
	WO 2	2004	0735	93		A2		2004	0902		WO 2	004-	FR32	0		2	0040	212
	WO 2	2004	0735	93		A3		2004	1118									
		W:	ΑE,	AG,	AL,	AM,	ΑT,	ΑU,	AZ,	BA,	BB,	ВG,	BR,	BW,	BY,	BZ,	CA,	CH,
											DZ,							
			GE,	GH,	GM,	HR,	HU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
			LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI
		RW:									SL,							
											FI,							
											BF,							
									TD,				•	-	•		,	
	EP :	1594	486			A2		2005	1116		EP 2	004-	7104	13		2	0040	212
		R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT,	LI,	LU,	NL,	SE,	MC,	PT,
											AL,							·
	JP 2	2006									JP 2							212
	US 2	20060	0359	77		A1		2006	0216		US 2	005-	5420	56		2	0050	921
PRAI						Α		2003	0212									
	WO 2	2004-	-FR3:	20		W		2004	0212									
os	MARI	TA9	141:2	2002	17													

AΒ The invention discloses the use of mols., in particular in the fields of human and animal health and cosmetics. The compds. of the invention are acyl aminopropanediols, and their nitrogen and sulfur analogs, having advantageous pharmacol. and cosmetic properties. The compds. of the invention are usable in particular to prevent and/or treat cardiovascular diseases, dyslipidemias, syndrome X, restenosis, diabetes, obesity, hypertension, cancer, and dermatol. diseases, as well as in cosmetics to

fight against skin aging and its effects in particular against the appearance of wrinkles.

TT 733010-33-8P 733010-37-2P 733010-39-4P 733010-44-1P 733010-46-3P 733010-48-5P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-33-8 HCAPLUS

CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-37-2 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-39-4 HCAPLUS

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-44-1 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ \parallel & \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \parallel & \parallel & \text{O} \end{array}$$

RN 733010-46-3 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[(1-oxotetradecyl)amino]-1-[[(1-oxotetradecyl)amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ \text{Me-} \ (\text{CH}_2)_{13} - \text{S-} \ \text{CH}_2 - \text{C-} \ \text{S} \\ \text{Me-} \ (\text{CH}_2)_{12} - \text{C--} \ \text{NH-} \ \text{CH}_2 - \text{CH-} \ \text{CH}_2 - \text{NH-} \ \text{C--} \ (\text{CH}_2)_{12} - \text{Me} \\ \text{O} \end{array}$$

RN 733010-48-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1 [[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl] ester (9CI) (CFINDEX NAME)

$$\begin{array}{c} & \text{Me-} & \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{S-} & \text{CH}_2 & \text{O} \\ & & & & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & \\ \text{Me-} & & & & & & & & & \\ \text{Me-} & & & & & & & & & \\ \text{Me-} & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & \\ \text{Me-} & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & \\ \text{Me-} & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{S-} & \text{C-} & \text{CH}_2 - \text{C-} & \text{C-} \\ & & & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} & \text{CH}_2 - \text{C-} \\ & & & & & & \\ \text{CH}_2)_{13} - \text{CH}_2 - \text{C-} &$$

IT 733010-41-8

RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-41-8 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester (9CI) (CA INDEX NAME)

$${}^{\rm H_2N-CH_2}_{\rm H_2N-CH_2-CH-O-C-CH_2-S-(CH_2)_{13}-Me}$$

IT 733010-52-1P 733010-56-5P 733010-57-6P

733010-61-2P 736992-56-6P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-52-1 HCAPLUS

CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

RN 733010-56-5 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(1,1dimethylethoxy)carbonyl]amino]-1-[[[(1,1-dimethylethoxy)carbonyl]amino]met
hyl]ethyl] ester (9CI) (CA INDEX NAME)

RN 733010-57-6 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S-[2-amino-1-(aminomethyl)ethyl] ester (9CI) (CA INDEX NAME)

RN 733010-61-2 HCAPLUS

RN 736992-56-6 HCAPLUS

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2-ethanediyl] ester, hydrochloride (9CI) (CA INDEX NAME)

● HCl

IT 733010-53-2P

RL: SPN (Synthetic preparation); PREP (Preparation) (acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-53-2 HCAPLUS

● 2 HCl

RETABLE

	enced Author (RAU)	(RPY)	(RVL) (RPG)	i	Referenced (RWK)	i	Referenced File
Kuhajda,		+===== 1999			 O 9910321 A	•	HCAPLUS

L63 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1963:408508 HCAPLUS

DN 59:8508

OREF 59:1479h,1480a-e

- TI Enzyme-alterable alkylating agents. I. Synthesis, chemical properties, and toxicities of sulfur mustards containing enzyme-susceptible amide bonds
- AU Witten, Benjamin; Williamson, Charles E.; Sass, Samuel; Miller, Jacob I.; Best, Roland; Wicks, George E., Jr.; Kramer, Stanley P.; Weinberg, Tobias; Solomon, Robert D.; Goodman, Louis E.; Seligman, Arnold M.
- CS Sinai Hosp., Baltimore, MD
- SO Cancer (1962), 15, 1041-55
- DT Journal
- LA Unavailable
- AB A number of polyfunctional and monofunctional alkylating agents were synthesized in an attempt to develop carcinolytic compds. that would take advantage of reported differences in enzyme activity (e.g., esterase, amidase, and phosphamidase) between carcinoma and vital normal tissue. To take advantage of the situation wherein amidase is relatively low in tumor tissue, bifunctional amides of the general structure C1CH2CH2S(CH2)nCONH(CH2)xNHCO(CH2)nSCH2CH2Cl were compared with their monofunctional enzyme breakdown products as well as with other structurally related compds. Two methods of synthesis were employed. In one procedure, the appropriate amine in aqueous NaOH was treated with the desired acyl chloride at 0°, the precipitate filtered off and recrystd., treated with NaSCH2CH2OH to yield the alc. intermediate, which was converted to the sulfur mustard by gentle treatment with SOC12. In the

other procedure, a monofunctional sulfur mustard carboxylic acid was prepared by irradiating with ultraviolet light a mixture of the appropriate mercaptocarboxylic acid and CH2:CHCl in the presence of a catalyst. Treatment with SOC12 yielded an acid chloride, which was treated with the appropriate amine in CHCl3 with an excess of Na2CO3 to yield the sulfur mustard. Compds. synthesized included the chloro amides, (C1CH2CONHCH2) 2CH2, (C1CH2CONHCH2) 2, (C1CH2CH2CONHCH2) 2, (C1CH2CONHCH2CH2) 2CH2, and (C1CH2CH2CONHCH2CH2) 2; the hydroxy amides, HOCH2CH2SCH2CONHMe, (HOCH2CH2SCH2CONHCH2)2, (HOCH2CH2SCH2CH2CONHCH2)2, and (HOCH2CH2SCH2CH2CONHCH2CH2)2; the sulfur mustards, (C1CH2CH2SCH2CONHCH2)2, (C1CH2CH2SCH2CONHCH2)2CHOH, (C1CH2CH2SCH2CH2CONHCH2)2, (C1CH2CH2SCH2CONHCH2)2CH2, (C1CH2CH2SCH2CONHCH2CH2)2, (C1CH2CH2SCH2CH2CONHCH2)2CHOH, (C1CH2CH2SCH2CH2CONHCH2CH2)2, (C1CH2CH2SCH2CONHCH2CH2)CH2, C1CH2CH2SCH2CO2H, C1CH2CH2SCH2CONHMe, C1CH2CH2SCH2CH2CO2H, and C1CH2CH2SCH2COC1. Hydrolysis of these compds. at the C-Cl bond and the amide link was studied under various conditions. Hydrolysis of the amide link occurred only in the chlorine-containing compds. and not in the glycols. Comparisons of toxicities were encouraging in that the bifunctional compds. were much more toxic both to dogs and mice than were their monofunctional products. Furthermore, the ratio of toxicity of the bifunctional compound to its products was greater in dogs than in mice. This is in agreement with the lower serum amidase activity of dogs. Further interest in these agents was provided by the possibility of developing cytotoxic but rapidly hydrolyzing and detoxifying bifunctional agents for use in intra-arterial chemotherapy. 51 references. 91354-85-7, Acetamide, N,N'-(2-hydroxytrimethylene)bis[2-[(2chloroethyl)thio] - 91972-62-2, Propionamide, N, N'-(2-hydroxytrimethylene)bis[3-[(2-chloroethyl)thio]-(preparation of) 91354-85-7 HCAPLUS

RN 91972-62-2 HCAPLUS

(CA INDEX NAME)

CN Propionamide, N,N'-(2-hydroxytrimethylene)bis[3-[(2-chloroethyl)thio]-(7CI) (CA INDEX NAME)

Acetamide, N,N'-(2-hydroxytrimethylene)bis[2-[(2-chloroethyl)thio]- (7CI)

PAGE 1-B

- CH2-CH2C1

IT

RN

CN

```
=> => fil uspatful
FILE 'USPATFULL' ENTERED AT 08:21:55 ON 15 AUG 2006
CA INDEXING COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)
FILE COVERS 1971 TO PATENT PUBLICATION DATE: 15 Aug 2006 (20060815/PD)
FILE LAST UPDATED: 15 Aug 2006 (20060815/ED)
HIGHEST GRANTED PATENT NUMBER: US7093300
HIGHEST APPLICATION PUBLICATION NUMBER: US2006179536
CA INDEXING IS CURRENT THROUGH 15 Aug 2006 (20060815/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 15 Aug 2006 (20060815/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Apr 2006
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Apr 2006
=> d his 167
     (FILE 'REGISTRY' ENTERED AT 08:19:24 ON 15 AUG 2006)
     FILE 'REGISTRY' ENTERED AT 08:20:37 ON 15 AUG 2006
     FILE 'HCAPLUS' ENTERED AT 08:20:57 ON 15 AUG 2006
     FILE 'USPATFULL' ENTERED AT 08:21:32 ON 15 AUG 2006
L67
              3 S L59 OR L28
     FILE 'USPATFULL' ENTERED AT 08:21:55 ON 15 AUG 2006
=> d bib abs hitstr tot
L67 ANSWER 1 OF 3 USPATFULL on STN
AN
       2006:182580 USPATFULL
ΤI
       Therapeutic use of acyl glycerols and the nitrogen- and sulphur-
       containing analogues thereof
IN
       Darteil, Raphael, Lille, FRANCE
       Caumont-Bertrand, Karine, Frelinghien, FRANCE
       Najib, Jamila, Santes, FRANCE
PΤ
       US 2006154984
                          Α1
                               20060713
AΤ
       US 2004-542512
                          Α1
                               20040212 (10)
       WO 2004-FR322
                               20040212
                               20050718 PCT 371 date
PRAI
       FR 2003-1691
                           20030212
DТ
       Utility
FS
       APPLICATION
LREP
       NIXON & VANDERHYE, PC, 901 NORTH GLEBE ROAD, 11TH FLOOR, ARLINGTON, VA,
       22203, US
CLMN
       Number of Claims: 25
ECL
       Exemplary Claim: 1-24
DRWN
       6 Drawing Page(s)
LN.CNT 4597
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention relates to the use of acyl glycerols and the nitrogen- and
       sulfur-containing analogues thereof in the therapeutic field,
       particularly in human health. The inventive compounds have advantageous
       pharmacological properties and are particularly of use for the
       prevention or treatment of neurodegenerative diseases.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT. IT 733010-33-8P 733010-35-0P 733010-37-2P

733010-39-4P 733010-46-3P 733010-48-5P

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-33-8 USPATFULL

CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-35-0 USPATFULL

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O-} \text{CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} (\text{CH}_2)_{13} - \text{Me}_2 \\ \parallel & \text{O} \end{array}$$

RN 733010-37-2 USPATFULL

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O} \\ | \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O-} \text{CH}_2 - \text{CH-} \text{CH}_2 - \text{NH-} \text{C-} (\text{CH}_2)_{14} - \text{Me} \\ | \\ \text{O} \end{array}$$

RN 733010-39-4 USPATFULL

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-46-3 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[(1-oxotetradecyl)amino]-1-[[(1-oxotetradecyl)amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S} & \text{O} \\ | & | & | \\ \text{Me-} (\text{CH}_2)_{12} - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{CH}_2 - \text{NH-} \text{C-} (\text{CH}_2)_{12} - \text{Me} \\ | & | & | & | \\ \text{O} \end{array}$$

RN 733010-48-5 USPATFULL

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S-} \text{CH}_2 & \text{O} \\ & | & || \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ & || \\ \text{O} \end{array}$$

IT 733010-41-8 733010-44-1

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-41-8 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester (9CI) (CA INDEX NAME)

RN 733010-44-1 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1[[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

IT 733010-52-1P 733010-53-2P 733010-56-5P 733010-57-6P 733010-61-2P 733010-62-3P

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-52-1 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA
INDEX NAME)

RN 733010-53-2 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)

$${}^{\rm H_2N-CH_2}_{\rm H_2N-CH_2-CH-O-C-CH_2-S-(CH_2)_{13}-Me}$$

●2 HC1

RN 733010-56-5 USPATFULL

RN 733010-57-6 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-amino-1-(aminomethyl)ethyl] ester (9CI) (CA INDEX NAME)

RN 733010-61-2 USPATFULL

$$\begin{array}{c} & \text{O} \\ & \text{H} \\ & \text{t-BuO-C-NH-CH}_2 & \text{O} \\ & & \text{H} \\ \text{Me- (CH}_2)_{13} - \text{S-CH}_2 - \text{C-S-CH}_2 - \text{CH-S-C-CH}_2 - \text{S- (CH}_2)_{13} - \text{Me} \\ & \text{H} \\ & \text{O} \end{array}$$

RN 733010-62-3 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2ethanediyl] ester (9CI) (CA INDEX NAME)

IT 733010-54-3P

(acyl glycerols and nitrogen and sulfur analogs for therapeutic use)

RN 733010-54-3 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(tetradecylthio)acetyl]amino]-1-[[[(tetradecylthio)acetyl]amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ \parallel & \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \parallel & \parallel & \parallel \\ \text{O} \end{array}$$

```
L67
    ANSWER 2 OF 3 USPATFULL on STN
ΑN
       2006:81160 USPATFULL
ΤI
       Acylated aminopropanediols and analogues and therapeutic uses thereof
IN
       Darteil, Raphael, Lille, FRANCE
       Caumont-Bertrand, Karine, Frelinghien, FRANCE
       Najib, Jamila, Santes, FRANCE
ΡI
       US 2006069156
                          A1
                                20060330
ΑI
       US 2004-541225
                          A1
                                20040212 (10)
       WO 2004-FR319
                                20040212
                                20050701 PCT 371 date
PRAI
       FR 2003-1688
                           20030212
DT
       Utility
FS
       APPLICATION
       NIXON & VANDERHYE, PC, 901 NORTH GLEBE ROAD, 11TH FLOOR, ARLINGTON, VA,
LREP
       22203, US
CLMN
       Number of Claims: 17
ECL
       Exemplary Claim: 1-17
DRWN
       3 Drawing Page(s)
LN.CNT 2995
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention relates to novel acylated aminopropanediols and the
```

nitrogen and sulfur analogues thereof, pharmaceutical compositions

comprising same, therapeutic uses thereof, in particular for the treatment of cerebral ischemia. The invention also provides a method of preparing said derivatives.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 733010-53-2P, 1,3-Diamino-2-(tetradecylthioacetyloxy)propane dihydrochloride

 $(PPAR\alpha \ agonist; \ preparation \ of \ acyl \ aminopropanediols \ as \ PPAR \ agonists \ for \ treating \ ischemia)$

RN 733010-53-2 USPATFULL

●2 HC1

IT 733010-33-8P, 1-[(Tetradecylthioacetyl)amino]-2,3di[(palmitoyl)oxy]propane 733010-35-0P, 3-[(Tetradecylthioacetyl)amino]-1,2-di[(tetradecylthioacetyl)oxy]propane 733010-37-2P, 3-[(Palmitoyl)amino]-1,2di[(tetradecylthioacetyl)oxy]propane 733010-39-4P, 1,3-Di[(tetradecylthioacetyl)amino]propan-2-ol 733010-41-8P, 1,3-Diamino-2-[[(tetradecylthio)acetyl]oxy]propane 733010-44-1P , 1,3-Di[(tetradecylthioacetyl)amino]-2-[(tetradecylthioacetyl)oxy]propan e 733010-48-5P 733010-54-3P, 1,3-Di[(tetradecylthioacetyl)amino]-2-[(tetradecylthioacetyl)thio]propane 738604-36-9P, 1,3-Dioleoylamino-2-(tetradecylthioacetyloxy)propan (PPARa agonist; preparation of acyl aminopropanediols as PPAR agonists for treating ischemia) RN 733010-33-8 USPATFULL CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & & & & \\ \text{Me-} & (\text{CH}_2)_{14} - \text{C-} \text{O-} \text{CH}_2 & \text{O} \\ & & & | & | \\ \text{Me-} & (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{(CH}_2)_{14} - \text{Me} \\ & & | & \\ & & | & \\ & & | & \\ & & | & \\ & & | & \\ \end{array}$$

RN 733010-35-0 USPATFULL

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{O-} \text{CH}_2 & \text{O} \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} (\text{CH}_2)_{13} - \text{Me} \\ \text{O} \end{array}$$

RN 733010-37-2 USPATFULL

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2ethanediyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ || \\ \text{Me-} & (\text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{O} \\ & | \\ \text{Me-} & (\text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{O-} & \text{CH}_2 - \text{CH-} & \text{CH}_2 - \text{NH-} & \text{C-} & (\text{CH}_2)_{14} - \text{Me} \\ & || \\ & \text{O} \end{array}$$

RN 733010-39-4 USPATFULL

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-41-8 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-amino-1-(aminomethyl)ethyl ester (9CI) (CA INDEX NAME)

RN 733010-44-1 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1[[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{Me-} & \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 & \text{O} \\ & & & & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & \\ \text{Me-} & & & & & & & & & & \\ \text{CH}_2)_{13} - \text{S-} & \text{CH}_2 - \text{C-} & \text{NH-} & \text{CH}_2 - \text{CH-} & \text{O-} & \text{C-} & \text{CH}_2 - \text{S-} & \text{(CH}_2)_{13} - \text{Me} \\ & & & & & & & & & & \\ \text{O} & & & & & & & & \\ \end{array}$$

RN 733010-48-5 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1 [[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl] ester (9CI) (CA
 INDEX NAME)

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S-} \text{CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \parallel & \parallel \\ \text{O} \end{array}$$

RN 733010-54-3 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(tetradecylthio)acetyl]amino]-1-[[[(tetradecylthio)acetyl]amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \parallel & \parallel \\ \text{O} \end{array}$$

RN 738604-36-9 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(9Z)-1-oxo-9-octadecenyl]amino]-1-[[(9Z)-1-oxo-9-octadecenyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

Double bond geometry as shown.

Me (CH₂) 7
$$Z$$
 (CH₂) 7 X (CH₂) 7 X

PAGE 1-B

IT 733010-52-1P, 1,3-Di[(tert-butyloxycarbonyl)amino]-2-[[(tetradecylthio)acetyl]oxy]propane 733010-56-5P, 1,3-Di[(tert-butyloxycarbonyl)amino]-2-[(tetradecylthioacetyl)thio]propan e 733010-61-2P, 1-[(tert-Butyloxycarbonyl)amino]-2,3di[[(tetradecylthio)acetyl]thio]propane 736992-56-6P, 1-Amino-2,3-di[[(tetradecylthio)acetyl]thio]propane hydrochloride 738604-37-0P, 1,3-Diamino-2-(tetradecylthioacetylthio)propane dihydrochloride (intermediate; preparation of acyl aminopropanediols as PPAR agonists for treating ischemia) RN 733010-52-1 USPATFULL CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{O} \\ || \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ | & || \\ \text{t-BuO-C-NH-CH}_2 - \text{CH-O-C-CH}_2 - \text{S- (CH}_2)_{13} - \text{Me} \\ || \\ \text{O} \end{array}$$

$$\begin{array}{c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ &$$

RN 733010-61-2 USPATFULL

$$\begin{array}{c} \text{O} \\ || \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ | & || \\ \text{Me- (CH}_2)_{13} - \text{S-CH}_2 - \text{C-S-CH}_2 - \text{CH-S-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ || & \text{O} \end{array}$$

RN 736992-56-6 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2-ethanediyl] ester, hydrochloride (9CI) (CA INDEX NAME)

HC1

RN 738604-37-0 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-amino-1-(aminomethyl)ethyl] ester, dihydrochloride (9CI) (CA INDEX NAME)

●2 HCl

```
L67
    ANSWER 3 OF 3 USPATFULL on STN
AN
       2006:41325 USPATFULL
TΙ
       Uses of acylated aminopropanediols and sulphur and nitrogen analogues of
IN
       Najib, Jamila, Santes, FRANCE
PA
       Gentif, Loos, FRANCE, F-59120 (non-U.S. corporation)
PΤ
       US 2006035977
                          Α1
                               20060216
ΑI
       US 2003-542056
                          Α1
                               20040212 (10)
       WO 2004-FR320
                               20040212
                               20050921 PCT 371 date
PRAT
       FR 2003-1689
                           20030212
חת
       Utility
FS
       APPLICATION
LREP
       NIXON & VANDERHYE, PC, 901 NORTH GLEBE ROAD, 11TH FLOOR, ARLINGTON, VA,
       22203, US
CLMN
       Number of Claims: 19
ECL
       Exemplary Claim: 1-18
DRWN
       4 Drawing Page(s)
LN.CNT 3511
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
       The invention relates to the use of molecules, particularly in the
       fields of human and veterinary health and cosmetics. The inventive
       compounds are acylated aminopropanediols and the nitrogen- and
       sulfur-containing analogues thereof and have advantageous
       pharmacological and cosmetic properties. In particular, the inventive
       compounds can be used to prevent and/or treat dyslipidemias,
       cardiovascular diseases, syndrome X, restenosis, diabetes, obesity,
       hypertension, some cancers, dermatological diseases, and, in the field
       of cosmetics, to combat skin ageing and the effects of same, in
       particular the development of wrinkles and the like.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 733010-33-8P 733010-37-2P 733010-39-4P

733010-44-1P 733010-46-3P 733010-48-5P

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-33-8 USPATFULL

CN Hexadecanoic acid, 1-[[[(tetradecylthio)acetyl]amino]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-37-2 USPATFULL

CN Acetic acid, (tetradecylthio)-, 1-[[(1-oxohexadecyl)amino]methyl]-1,2ethanediyl ester (9CI) (CA INDEX NAME)

RN 733010-39-4 USPATFULL

CN Acetamide, N,N'-(2-hydroxy-1,3-propanediyl)bis[2-(tetradecylthio)- (9CI) (CA INDEX NAME)

RN 733010-44-1 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(tetradecylthio)acetyl]amino]-1[[[(tetradecylthio)acetyl]amino]methyl]ethyl ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 & \text{O} \\ & \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{O-} \text{C-} \text{CH}_2 - \text{S-} (\text{CH}_2)_{13} - \text{Me} \\ & \parallel & \text{O} \end{array}$$

RN 733010-46-3 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[(1-oxotetradecyl)amino]-1-[[(1-oxotetradecyl)amino]methyl]ethyl] ester (9CI) (CA INDEX NAME)

$$\begin{array}{c} \text{Me-} & \text{CH}_2)_{\,1\,3} - \text{S-} \, \text{CH}_2 - \text{C-} \, \text{S} & \text{O} \\ | & | & | \\ \text{Me-} & \text{CH}_2)_{\,1\,2} - \text{C-} \, \text{NH-} \, \text{CH}_2 - \text{CH-} \, \text{CH}_2 - \text{NH-} \, \text{C-} \, \text{(CH}_2)_{\,1\,2} - \text{Me} \\ | & \text{O} \end{array}$$

RN 733010-48-5 USPATFULL

$$\begin{array}{c} & \text{O} \\ \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{S-} \text{CH}_2 & \text{O} \\ \parallel & \parallel \\ \text{Me-} (\text{CH}_2)_{13} - \text{S-} \text{CH}_2 - \text{C-} \text{NH-} \text{CH}_2 - \text{CH-} \text{S-} \text{C-} \text{CH}_2 - \text{S-} \text{(CH}_2)_{13} - \text{Me} \\ \parallel & \parallel \\ \text{O} \end{array}$$

IT 733010-41-8

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-41-8 USPATFULL

IT 733010-52-1P 733010-56-5P 733010-57-6P 733010-61-2P 736992-56-6P

(acyl aminopropanediols and analogs, preparation, and therapeutic and cosmetic use)

RN 733010-52-1 USPATFULL

CN Acetic acid, (tetradecylthio)-, 2-[[(1,1-dimethylethoxy)carbonyl]amino]-1[[[(1,1-dimethylethoxy)carbonyl]amino]methyl]ethyl ester (9CI) (CA
INDEX NAME)

$$\begin{array}{c} & \circ \\ & | \\ t-\text{BuO}-\text{C-NH}-\text{CH}_2 & \circ \\ & | & | \\ t-\text{BuO}-\text{C-NH}-\text{CH}_2-\text{CH}-\text{O}-\text{C}-\text{CH}_2-\text{S}-\text{(CH}_2)}_{13}-\text{Me} \\ & | \\ & | \\ & \circ \end{array}$$

RN 733010-56-5 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S-[2-[[(1,1-dimethylethoxy)carbonyl]amino]-1-[[[(1,1-dimethylethoxy)carbonyl]amino]m

ethyl]ethyl] ester (9CI) (CA INDEX NAME)

RN 733010-57-6 USPATFULL

$$H_2N-CH_2$$
 O $| | | H_2N-CH_2-CH-S-C-CH_2-S-(CH_2)_{13}-Me$

RN 733010-61-2 USPATFULL

$$\begin{array}{c} \text{O} \\ \text{H} \\ \text{t-BuO-C-NH-CH}_2 & \text{O} \\ & | & | \\ \text{Me- (CH}_2)_{13} - \text{S-CH}_2 - \text{C-S-CH}_2 - \text{CH}_2 - \text{S-C-CH}_2 - \text{S-(CH}_2)_{13} - \text{Me} \\ & | & \\ \text{O} \end{array}$$

RN 736992-56-6 USPATFULL

CN Ethanethioic acid, (tetradecylthio)-, S,S'-[1-(aminomethyl)-1,2-ethanediyl] ester, hydrochloride (9CI) (CA INDEX NAME)

O
$$H_2N-CH_2$$
 O \parallel \parallel \parallel \parallel Me- (CH₂)₁₃-S-CH₂-C-S-CH₂-CH-S-C-CH₂-S-(CH₂)₁₃-Me

● HCl

IT 733010-53-2P

(acyl aminopropanediols and analogs, preparation, and therapeutic and $\operatorname{cosmetic}$ use)

RN 733010-53-2 USPATFULL

●2 HC1

L23

L24

L25

L26

L27

L28 L29

L30

L31 L32

```
=> d his
      (FILE 'HOME' ENTERED AT 07:24:29 ON 15 AUG 2006)
                 SET COST OFF
     FILE 'HCAPLUS' ENTERED AT 07:24:45 ON 15 AUG 2006
L1
               1 S US20060069156/PN OR (US2005-541225# OR WO2004-FR319 OR FR2003
                 E GENFIT/PA, CS
              27 S E3-E13
L2
                 E DARTEIL/AU
              20 S E4-E8
L3
                 E CAUMONT/AU
L4
              11 S E8, E14
                 E BERTRAND/AU
1.5
               5 S E3
                 E BERTRAND K/AU
L6
               8 S E3-E5, E7
                 E NAJIB/AU
1.7
              33 S E22, E24, E25
                 SEL RN L1
     FILE 'REGISTRY' ENTERED AT 07:29:49 ON 15 AUG 2006
\Gamma8
              35 S E1-E35
L9
              9 S 733010-33-8 OR 733010-35-0 OR 733010-37-2 OR 733010-39-4 OR 7
L10
              1 S (733010-33-8 OR 733010-35-0 OR 733010-37-2 OR 733010-39-4 OR
             10 S L9, L10
L11
              25 S L8 NOT L11
L12
L13
                 STR
L14
               1 S L13
L15
                 STR L13
L16
               0 S L15
L17
                 SCR 1926 OR 2019
L18
                 SCR 2021
L19
                 SCR 1126 OR 1149 OR 1164
L20
                 SCR 1199 AND 1992
L21
               0 S L13 AND (L17 OR L18) AND L19 AND L20
L22
                 STR L13
```

25 S L22 AND L20 AND L19 AND (L18 OR L17)

SAV L24 KUMAR541/A TEMP

18 S L8 AND L24

15 S L11, L27

STR L15

8 S L25 NOT L11

8 S L15 SAM SUB=L24

7 S L30 SAM SUB=L24

110 S L30 FUL SUB=L24

7731 S L22 AND L20 AND L19 AND (L18 OR L17) FUL

5 S L26 NOT (C19H39NO3S OR C15H28N2O5S OR C12H21NO4S2)

```
SAV L32 KUMAR541A/A
L33
                STR L22
L34
              9 S L33 SAM SUB=L24
L35
            141 S L33 FUL SUB=L24
                 SAV L35 KUMAR541B/A
L36
                STR
L37
            154 S L32 OR L35
L38
              1 S L36 SAM SUB=L37
L39
             19 S L36 FUL SUB=L37
                SAV L39 KUMAR541C/A
L40
            135 S L37 NOT L39
            120 S L40 NOT L28
L41
     FILE 'HCAOLD' ENTERED AT 08:02:34 ON 15 AUG 2006
L42
              0 S L28
L43
              1 S L41
                SEL AN
                EDIT E36 /AN /OREF
     FILE 'HCAPLUS' ENTERED AT 08:03:57 ON 15 AUG 2006
T.44
              1 S E36
L45
              3 S L28
L46
             42 S L41
L47
              1 S L44 AND L45, L46
              3 S L45 AND L1-L7
L48
L49
              2 S L46 AND L1-L7
L50
             31 S L46 AND (PD<=20030212 OR PRD<=20030212 OR AD<=20030212)
L51
              0 S L41 (L) (THU OR PAC OR PKT OR DMA)/RL AND L50
L52
              0 S L41 (L) BAC/RL AND L50
L53
             14 S L50 AND (PHARMACEUT? OR PHARMACOL? OR BIOMOL? OR PATHOL? OR C
L54
             16 S L50 AND P/DT
L55
             24 S L53, L54
L56
              7 S L50 NOT L55
                SEL HIT RN L50
     FILE 'REGISTRY' ENTERED AT 08:08:36 ON 15 AUG 2006
L57
             62 S E37-E98
L58
             58 S L41 NOT L57
L59
              3 S L58 AND (C19H40N2OS2 OR C35H69NO2S4 OR C47H92N2O3S2)
     FILE 'HCAOLD' ENTERED AT 08:17:01 ON 15 AUG 2006
L60
              0 S L59
     FILE 'HCAPLUS' ENTERED AT 08:17:04 ON 15 AUG 2006
L61
              2 S L59
L62
              4 S L47-L49, L61
L63
              4 S L45, L62
                SEL RN
     FILE 'REGISTRY' ENTERED AT 08:19:24 ON 15 AUG 2006
L64
            168 S E99-E266
L65
             23 S L64 AND L24
L66
              5 S L65 NOT L28, L59
     FILE 'REGISTRY' ENTERED AT 08:20:37 ON 15 AUG 2006
     FILE 'HCAPLUS' ENTERED AT 08:20:57 ON 15 AUG 2006
     FILE 'USPATFULL' ENTERED AT 08:21:32 ON 15 AUG 2006
L67
              3 S L59 OR L28
```

FILE 'USPATFULL' ENTERED AT 08:21:55 ON 15 AUG 2006

=>

8-515

ACCESS DB # 198/48

PLEASE PRINT CLEARLY

Scientific and Technical Information Center

SEARCH REQUEST FORM

Requestor's Full Name:	uwar Eva	miner#: 69594_ Da	te. 8/10/06
Requester's Full Name.	per: 2- 0640	Serial Number: 10/5	
		s Format Preferred (circle).	PAPER DISK
**************************************	**************************************	*********	******
To ensure an efficient and quality search, please a			4.
Title of Invention: 17 cylare 2	I amino propo	inedials and an	alogi and
Inventors (please provide full names):	Kaphael D	iarteil et al.	
•		· · · · · · · · · · · · · · · · · · ·	
Earliest Priority Date: 2/12/	03		
Search Topic: Please provide a detailed statement of the search to elected species or structures, keywords, synonyms, a Define any terms that may have a special meaning.	acronyms, and registry number	rs, and combine with the concept o	be searched. Include the or utility of the invention.
For Sequence Searches Only Please include all	pertinent information (parent,	child, divisional, or issued patent	numbers) along with the
appropriate serial number.			
		2	
2 .62	· · · · · · · · · · · · · · · · · · ·		
R		0 .	
•		K 1	
	\G3		
	\ .	·	
	R3		
	- 0		7 1
G2 & G3 age 0,	Sor MR9,	und G24 G2 au	not fimultaneously
G2 & G3, are O,	•	<i>ા</i> એ <i>ઉ</i> ત્તર ઉત્તર	not simultanearly
	4	m G24 G3 an	not simultanearly
R & Ry are H, ally	4	• 2	not simultanearly
\$5 15 arky	λ, co ^{R5} , co	• 2	not simultanearly
\$2 12 and H, alled & 4, alled	λ, co ^{R5} , co	• 2	not simultaneamy
X 15 5, 5e, 5e, 5e, 5e, 5e, 5e, 5e, 5e, 5e,	λ, co ^{R5} , co	• 2	not simultanearly
\$ \$ \$ \$ 0-11 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1, coq ⁵ , co)(CM2)2047 - X - N	AUS 10 ZMT
X 15 5, 5e, 5e, 5e, 5e, 5e, 5e, 5e, 5e, 5e,	1, coq ⁵ , co)(CM2)2047 - X - N	AUS 10 ZMT
\$ \$ \$ \$ 0-11 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1, coq ⁵ , co)(CM2)2047 - X - N	AUS 10 ZMT
\$ \$ \$ \$ 0-11 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1, coq ⁵ , co	10 (CM2)2m41 -X-N	AUS 10 ZMT
\$ \$ \$ \$ 0 0 \$ \$ 0 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	1, coq ⁵ , co	10 (CM2)2m41 -X-N	A simulaneous y.
\$ \$ \$ \$ 0 0 \$ \$ 0 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	A A A A A A A A A A	0(CM2)2m31-X-N	A simulaneous y.
R & RY one H, alry RI R2 & R3 one Y R5 is carry X is 5, 5e, 5e N is 0-11 R6 is alryl etc. Proviso that Ga Ra of	A A A A A A A A A A	not refresch of	A simulaneous y.
Por Ry one H, alry Por Roll one H, alry Po	A N, COR^5 , $COR^$	not represent of Vendors and cost where	A simulaneous y.
R & R Y ONE H, alry R & R & A & A & A R & R & A & A & A R & R & A & A R & R & A & A X & S & S & S & S N & S & A & S N & S & A & A Principo Home #: 22504	A, CORS, CO O Or S & 2 MA G3 \$\frac{1}{3} \rightarrow \frac{1}{3} \rightarrow \frac{1} \rightarrow \frac{1}{3} \rightarrow \frac{1}{3} \rightarrow \f	not represent of vendors and cost where	Simulaneous J. ***********************************
R & R & One H, alry R & R & One H, alry R & R & A & One H R & S & Carry X S & Se, Se N S & O-11 R & S & Alry & Ar. Viriso Had Ga Ra of Staff USE ONLY Searcher: Searcher Phone #: Searcher Phone #: Searcher Location:	A Sequence (#) Structure (#)	nor reserved of the served of	A Similahears J. ***********************************
R & R Y ONE H, alrey R & R Y ONE H, alrey R & R Y ONE H, alrey R & R Y ONE H R & S & CO-11	CORS,	nor resent of the present of the pre	A Similahears J. ***********************************